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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/472,534	12/27/1999	ANTHONY MAZZURCO	036560.6630	8878

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ALCATEL USA  
INTELLECTUAL PROPERTY DEPARTMENT  
3400 W. PLANO PARKWAY, MS LEGL2  
PLANO, TX 75075

EXAMINER
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JAGANNATHAN, MELANIE

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/472,534

Applicant(s)

MAZZURCO ET AL.

Examiner

Melanie Jagannathan

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson US 5,479,608.

Regarding claims 16-21, 25-26, the claimed receiving one or more working channels and at least one protection channel at an input interface to transmission switch is disclosed by two digital cross-connects (Figure 1, elements 2A, 2B) connected with working paths (elements 41-4n) and protection path. The claimed performing a selection at the input interface between the working and protection channels in response to signal quality is disclosed by if signal failure is detected on one of working paths by one of the cross-connects, the other cross-connect is alerted so the protection path may be used. The claimed switching the selected ones of working and protection channels through one or more predetermined matrix connections where the matrix connections are not disrupted is disclosed by remaining working paths and protection path are switched and predetermined connections from cross-connects (elements A1-Aj, B1-Bk) are maintained. See columns 6-11.

Regarding claim 22, the claimed 1:1 linear automatic protection scheme is disclosed by 1:1 redundancy scheme. See columns 1-2, column 14, lines 41-54.

Regarding claims 23-24, the claimed receiving at least one inbound working channel and at least one in bound protection channel and providing at least one outbound working channel and at least one outbound protection channel is disclosed by working paths and protection path between two cross-connects (See Figure 1). The claimed switching and routing information on inbound working channel to outbound protection channel and routing information on inbound protection channel to outbound working channel at an input/output interface w/o disrupting matrix connections is disclosed by if signal failure is detected on one of inbound working paths by node A, node B responds by routing on outbound protection path Pb. See Figures 3b-3e and columns 6-11.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ellinas et al. US 6,760,302 disclose automatic protection switching in a network.

Chang et al. US 6,226,111 disclose inter-ring cross-connect for survivable optical communication networks.

Ohara US 5,495,472 discloses utilizing protection paths as additional working paths in switching ring network systems.

Li et al. US 6,579,018 disclose four-fiber ring optical cross-connect system with working and protection spans.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163.

The examiner can normally be reached Monday-Friday 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3163.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**FRANK DUONG**  
**PRIMARY EXAMINER**

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Patent Examiner  
AU 2666

MJ